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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,675	02/27/2004	Mahesh Chowdhary	ACCU.P0002	3593

23349 7590 06/27/2005

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EXAMINER	
TRAN, DALENA	

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/788,675	CHOWDHARY, MAHESH	
	Examiner	Art Unit	
	Dalena Tran	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-13 and 16-19* is/are rejected.

7)☒ Claim(s) *5,6,14 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10/788,675			

EXAMINER

ART UNIT	PAPER
	20050622

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-19 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 10, and 19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (6,366,207) in view of Levine (6,502,035).

As per claim 1, Murphy discloses a method for detecting safe driving behavior in a vehicle, comprising the steps of: generating sensor data, on vehicle, that reflects vehicle movement (see column 2, lines 4-37), processing said sensor data to extract characteristics that reflect frequent lane changes of vehicle (see column 5, lines 8-67; column 6, lines 8-16; and column 8, lines 12-53). Murphy does not disclose frequent lane changes of said vehicle at high-speeds. However, Levine discloses generating a frequent lane change event based on said processed data, said frequent lane change event indicates frequent lane changes of said vehicle at high-speeds (see the abstract; column 1, lines 32-49; columns 2-3, lines 10-26; and columns 4-5, lines 23-63). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Murphy by combining indicates frequent lane changes of said vehicle at high-speeds for warning drivers and others of both the safe and unsafe movements of other vehicles to avoid dangers to themselves and to others.

Claims 10, and 19, are module system claims corresponding to method claim 1 above. Therefore, they are rejected for the same rationales set forth as above.

4. Claims 2-3, 7, 11-12, and 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (6,366,207), and Levine (6,502,035) as applied to claims 1, and 10 above, and further in view of Yamamura et al. (6,882,915).

As per claims 2, and 7, Murphy, and Levine do not disclose generating sensor data that detects vehicle heading changes. However, Yamamura et al. disclose generating sensor data that detects vehicle heading changes (see columns 7-8, lines 48-4; and column 35, lines 13-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Murphy, and Levine by combining generating sensor data that detects vehicle heading changes to determine vehicle future path, so a driving system can perform assisting the vehicle operator in avoiding any danger to avoid a risk of collision.

Also, as per claim 3, Yamamura et al. disclose generating sensor data that detects angular rate for yaw axis of said vehicle (see columns 37-38, lines 37-51).

Claims 11-12, and 16, are module system claims corresponding to method claims 2-3, and 7 above. Therefore, they are rejected for the same rationales set forth as above.

5. Claims 4, 8, 13, and 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (6,366,207), Levine (6,502,035), and Yamamura et al. (6,882,915) as applied to claims 3, and 12 above, and further in view of Lees (6,345,228).

As per claim 4, Murphy, Levine, and Yamamura et al. do not disclose points of inflexion from said angular rate data. However, Lees discloses extracting points of inflexion from said angular rate data (see column 6, lines 1-21); determining the slope

between said points of inflexion (see column 7, lines 15-42); determining peak values at said points of inflexion (see column 5, lines 30-67; and column 7, lines 43-67); and determining time separations between said points of inflexion (see columns 6-7, lines 22-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Murphy, Levine, and Yamamura et al. by combining points of inflexion from said angular rate data to determine an abrupt turning of vehicle so to immediately provide a warning or correct vehicle running behavior to provide safety for vehicle and others.

As per claim 8, Yamamura et al. disclose wherein generating a frequent lane change event based on the slope of the angular rate (see column 8, lines 30-42; column 9, lines 40-55; and column 10, lines 8-23).

Claims 13, and 17, are module system claims corresponding to method claims 4, and 8 above. Therefore, they are rejected for the same rationales set forth as above.

6. Claims 9, and 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (6,366,207), and Levine (6,502,035) as applied to claims 1, and 10 above, and further in view of Fernandez (6,748,322).

As per claim 9, Murphy, and Levine do not disclose transmitting frequent lane change event from said vehicle to a server. However, Fernandez disclose transmitting frequent lane change event from said vehicle to a server (see columns 2-3, lines 23-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Murphy, and Levine, by combining transmitting frequent lane change event from said vehicle to a server to monitor vehicle violation, and to record

a date and time when a driver violated one or more of a predetermined conditions and to notify an authority agency.

Claim 18, is module system claim corresponding to method claim 9 above. Therefore, it is rejected for the same rationales set forth as above.

7. Claims 5-6, and 14-15, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

. Mohlenkamp et al. (6,178,374)

. Abe et al. (6,298,290)

. Pierowicz et al. (6,516,273)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 571-272-6968. The examiner can normally be reached on M-F 6:30 AM-4:00 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner
Dalena Tran

June 22, 2005